

THE ANNALS

AND

MAGAZINE OF NATURAL HISTORY.

[THIRD SERIES.]

“..... per litora spargite muscum,
Naiades, et circum vitreos considite fontes :
Pollice virgineo teneros hic carpite flores :
Floribus et pictum, divæ, replete canistrum.
At vos, o Nymphæ Craterides, ite sub undas ;
Ite, recurvato variata corallia trunco
Vellite muscosis e rupibus, et mihi conchas
Ferte, Deæ pelagi, et pingui conchylia succo.”
N. Parthenii Giannettasii Ecl. 1.

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I.—*Description of a new Species of Marine Worm* (*Phenacia pulchella*). By EDWARD PARFITT.

[Plate I.]

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,

I beg to introduce to your notice a very beautiful new species of marine worm; it was cast up at my feet by the waves at Exmouth, January 6th, during a heavy gale. I forwarded a rough sketch of it to my friend Dr. Baird, of the British Museum, who informed me it was new to him, and that he could find no description of it. In M. de Quatrefages's "Classification of the Annelides," published in the 'Annals' for January last, p. 22, he has separated the genus *Sabellidis*, and raised those species with simple buccal cirri to the rank of a new genus, *Phenacia*; and it is to this genus that the present species belongs: it will therefore stand thus:—

Family XXV. Terebellea.

Genus PHENACIA, Quatrefages.

Phenacia pulchella, mihi.

Body composed of about forty annulations, the anterior compressed and rugose, short, but gradually growing longer
Ann. & Mag. N. Hist. Ser. 3. Vol. xviii. 1

towards the posterior end, which is thickened and rugose. The anterior annulations are armed with two fascicles of yellow bristles, of about three or four each, placed opposite to each other: the rest of the rings have about two each; but the numbers vary. Colour pale orange-red, the mouth with a purple cast. Buccal cirri twenty, ten on each side of the oral organ, white, beautifully maculated with oblong spots of orange-red down the centre. Dorsal cirri reflexed, purple, with a faint reddish tinge.

Length of the worm 2 inches, of the tube 3 inches; diameter at larger or anterior end 2 lines.

This species constructs a rather flexuose tube made of a thin horny substance similar to that of the polypidoms of the Sertularias, and coated with grains of sand and comminuted shells, with bits of corallines attached.

The worm is able to raise its head considerably above the first or anterior ring, bearing the dorsal cirri, as shown in the figure (Plate I.) on the right. Generally speaking, its movements were slow; but when fully protruded it is a beautiful creature, the dorsal cirri contrast so strongly with the delicately painted buccal organs. I kept it alive for several days, and I found that it seldom protruded itself by day; but as evening closed in it would then develop itself to its fullest extent.

I am, Gentlemen,
Yours obediently,
EDWARD PARFITT.

Devon and Exeter Institution,
April 21, 1866.

II.—*On the Affinities of Peridinium Cypripedium, Jas-Clk., and Urocentrum Turbo, Ehr.* By Prof. H. JAMES-CLARK, A.B., B.S., Soc. Am. Acad.

In the 'Proceedings of the American Academy' of February 1865 I published a paper on the anatomy and physiology of *Peridinium Cypripedium*, mihi. That article, with the accompanying plate, was copied into the 'Annals and Magazine of Natural History' for October 1865. In the December Number of the same 'Annals' I find some remarks on my paper by Mr. H. J. Carter, the principal aim of which is to show that the animal which I have described is not a *Peridinium* but a *Urocentrum*. I wish, through the medium of your Magazine, to give my reasons why I did not formerly, and do not now, believe that the identification of that gentleman can be sustained.

Let me state, in the first place, that the whole question hinges on the identification of the animal as described and figured by